

## EASYWIPE™ PU COATED FABRIC TEST RESULTS-TEST NO: TK10-07110

### 01. Dimensional Change after Washing

(BS EN ISO 5077:2008)

Washing Method: BS EN ISO 6330:2001; procedure 1A with ECE Reference Detergent A+Sodium Perborate+TAED; Washing Machine: Wascator; Ballast : 100% Knitted Polyester; Drying Method: Tumble Dry Low.

SAMPLE			DIRECTION	AFTER 1 CYCLE	REQUIREMENT		
					Min.(%)	Max.(%)	
001	White	Whole	Warp	-4.3	-	-	NC
			Weft	-1.8	-	-	

### 02. Appearance Evaluation after Washing

[STR In-House Method (for EU Market)]

Washing Method: BS EN ISO 6330:2001; procedure 1A, 92°C ECE Reference Detergent A + Sodium Perborate + TAED; Wash Machine: Wascator; 100% Knitted Polyester; Drying Method: Tumble Dry Low.

SAMPLE	001	White	Whole			
				RESULT	REQUIREMENT	
AFTER 1 st CYCLE	Color Change		4-5		-	NC
	Self Staining		-		-	
	Spirality		-		-	
	Pilling		4-5		-	
	Overall		Satisfactory		Satisfactory	

### 03. Colour Fastness to Washing

(BS EN ISO 105-C06:1997 with Corr. No. 1)

Test No. E25 at 95°C with 25 steel balls and ECE reference detergent B.

SAMPLE			COLOUR CHANGE	COLOUR STAINING - MULTIFIBRE DW						REQUIREMENT		
				Acetate	Cotton	Polyamide	Polyester	Acrylic	Wool	COLOUR CHANGE	COLOUR STAINING	
001	White	Marine+White	4-5	4-5	4-5	4-5	4-5	4-5	4-5	-	-	NC

### 04. Colour Fastness to Rubbing

(BS EN ISO 105-X12:2002 with Corr. No. 1)

SAMPLE			OBLIQUE DIRECTION		REQUIREMENT		
			Dry	Wet	Dry	Wet	
001	White	Marine	4	4-5	-	-	NC

### 05. Colour Fastness to Artificial Light: Xenon Arc Fading Lamp Test (BS EN ISO 105-B02:1999 with Corr. No. 1 & 2 and Amd. No. 1)

SAMPLE			OBLIQUE DIRECTION	REQUIREMENT	
001	White	Marine	4	-	NC
		White	3-4		NC

### 06. Colour Fastness to Perspiration

(BS EN ISO 105-E04:2009)

SAMPLE			SOLUTION	COLOUR CHANGE	COLOUR STAINING - MULTIFIBRE TV						REQUIREMENT		
					Triacetate	Cotton	Polyamide	Polyester	Acrylic	Viscose	COLOUR CHANGE	COLOUR STAINING	
001	White	Marine+White	Acid	4-5	4-5	4-5	4-5	4-5	4-5	4-5	-	-	NC
			Alkaline	4-5	4-5	4-5	4-5	4-5	4-5	4-5	-	-	

**07. Colour Fastness to Water (BS EN ISO 105-E01:1996 with Corr. No. 1)**

SAMPLE			COLOUR CHANGE	COLOUR STAINING - MULTIFIBRE DW						REQUIREMENT		
				Acetate	Cotton	Polyamide	Polyester	Acrylic	Wool	COLOUR CHANGE	COLOUR STAINING	
001	White	Marine+ White	4-5	4-5	4-5	4-5	4-5	4-5	4-5	-	-	NC

**08. Colour Fastness to Chlorinated Water (BS EN ISO 105-E03:1997)**

SAMPLE			COLOUR CHANGE	REQUIREMENT	
001	White	Marine	4-5	-	NC
		White	4-5		NC

**10. Bursting Strength - Pneumatic Method (BS EN ISO 13938-2:1999)**

SAMPLE			BURSTING STRENGTH (kPa)	BURSTING HEIGHT (mm)	REQUIREMENT (kPa)	
001	White	Whole	358	32	-	NC

**11. Abrasion Resistance - Specimen Breakdown (Abrasion Load: 9 kPa) (BS EN ISO 12947-2:1999)**

SAMPLE			AVERAGE BREAKDOWN (number of rubs)	COLOUR CHANGE AT 5000 RUBS	REQUIREMENT		
					BREAKDOWN	COLOUR CHANGE	
001	White	Marine	>20000	4-5	Min. 20000	-	PASS

**IGNITABILITY TEST RESULT EASYWIPE™ PU COATED FABRIC TEST NO: 150504**

**Fabric Weight at Conditioned Area BS EN 12127:1998**

The results do not include the selvedge;

Date of Test: 15 / NOVEMBER / 2009

SAMPLE	RESULT	REQUIREMENT	
A	213.3 g / m <sup>2</sup>	No Requirement	-

(242) Total uncertainty of measurement = ± 1.9 % (95% confidence limits)

**Tensile Strength-Strip Method BS EN ISO 13934-1:1999**

Gauge Length: 200 mm; Rate Of Extension: 100 mm/min; Pre-Tension: 5N; Dry Test Number Of Specimens: 5 Specimens Of Each Direction

SAMPLE A	WARP	WEFT	REQUIREMENT	
STRENGTH	588N	245.2N	No Requirement	-
ELONGATION	105.1%	245.1%		

(230) Total uncertainty of measurement = ±2.6% (95% confidence limits)

**\*\* Water Resistance - Hydrostatic Pressure ISO 811-1981**

The results do not include the selvedge;

Date of Test: 15 / NOVEMBER / 2009

SAMPLE A	RESULT	REQUIREMENT	
Water Pressures (mm)	Over 8000	No Requirement	-

(242) Total uncertainty of measurement = ±1.9 % (95% confidence limits)

\*\*This test was performed by STR Laboratory (Hong Kong) Report No:A41880932

**\*\* Tear Strength EN ISO 4674-1:2003 (Method A / Double Tongue)**

SAMPLE A	WARP	WEFT	REQUIREMENT
AVERAGE	53N	41.3N	No Requirement
MAXIMUM	56.9N	43.2N	
MINIMUM	49.4N	40.2N	
STANDARD DEVIATION, S:	3.0N	1.2N	
VARIATION COEFFICIENT, V:	5.6%	3.0%	

(230) Total uncertainty of measurement = ±2.6% (95% confidence limits)

\*\*This test was performed by STR Laboratory (Switzerland) Report No:29728

**\*\* Ignitability of Bedcovers and Pillows by Smouldering and Flaming Ignition Sources BS 7175:1989**

The test was carried out to BS7175:1989, Section 3. The results are as follows "The Following test results relate only to the ignitability of the test specimen under the particular conditions of the test and are not intended as a means of assessing the full potential fire hazard of the bedcovers in use"

IGNITION SOURCE	POSITION	DESIGNATION I/NI	IGNITION CRITERIA	COMMENTS
5	A	N / I	10 Minutes after ignition of the rib	Damage did not exceed the limits specified in BS7175:1989
5	B	N / I	10 Minutes after ignition of the rib	Damage did not exceed the limits specified in BS7175:1989

(230) Total uncertainty of measurement = ±2.6% (95% confidence limits)

\*\*This test was performed by STR Laboratory (UK) Report No: TN400129

**IGNITABILITY TEST RESULT - WIPEDOWN VINYL**

Position A - Ignition Source Placed on Top of The Specimen	TEST 1	TEST 2
Fabric melted / holed / ignited at	9 s	8 s
Flaming ceased at	3 min 15 s	2 min 51 s
Extent of damage	132 x 113 mm	150 x 145 mm
Holing through full thickness of specimen	YES	YES
Flaming still in progress 10 minutes after ignition of the crib? (YES / NO)	NO	NO
Extensive combustion (YES / NO)	NO	NO
Flaming combustion (YES / NO)	NO	NO
Progressive smouldering? (YES / NO)	NO	NO
Concealed smouldering? (YES / NO)	NO	NO
Overall result (IGNITION / NON-IGNITION)	NON- IGNITION	NON- IGNITION

Position B - Ignition Source Placed Below The Specimen	TEST 1	TEST 2
Fabric melted at	5 s	8 s
Fabric ignited at	8 s	2 min 51 s
Flaming ceased at	4 min 5 s	3 min 54 s
Extent of damage	70 x 200 mm	10 x 200 mm
Flaming debris observed? (YES / NO)	NO	NO
Flaming still in progress 10 minutes after ignition of the crib? (YES / NO)	NO	NO
Extensive combustion (YES / NO)	NO	NO
Flaming combustion (YES / NO)	NO	NO
Progressive smouldering? (YES / NO)	NO	NO
Concealed smouldering? (YES / NO)	NO	NO
Overall result (IGNITION / NON-IGNITION)	NON- IGNITION	NON- IGNITION

## UNDERWEAR TEST RESULTS : 1191/10

Test Methods: Determination of Water Absorption of Textile Fabrics			DIN 53923		
MARKING	UNIT	TEST RESULTS			
		CAMELLIA -1 WHITE	CAMELLIA -1 GREY	CAMELLIA -1 BLACK	
(1)	Water Absorption	%	124.3	113.0	122.7
MARKING	UNIT	TEST RESULTS			
		CAMELLIA -2 BLACK			
(1)	Water Absorption	%	341.0		
MARKING	UNIT	TEST RESULTS			
		CAMELLIA -3 WHITE	CAMELLIA -3 GREY	CAMELLIA -3 BLACK	
(1)	Water Absorption	%	613.6	821.4	814.6

## OPERATION GOWNS TEST RESULTS

Antibacterial Activity Test		AATC147-2004
TEST ORGANISM: <i>Staphylococcus aureus</i> (ATCC 6538) INCUBATION TEMPERATURE: 37 C ± 2 °C		INCUBATION PERIOD: 18 - 24 HOURS AGAR MEDIUM: NUTRIENT AGAR
TESTED SPECIMEN	TEST ORGANISM	RESULTS
SAMPLE 1 (25 X 50 mm)	<i>Staphylococcus aureus</i> (ATCC 6538)	NO GROWTH OF <i>Staphylococcus aureus</i> WAS OBSERVED DIRECTLY UNDERNEATH THE TESTED SPECIMEN.
SAMPLE 2 (25 X 50 mm)	<i>Staphylococcus aureus</i> (ATCC 6538)	NO GROWTH OF <i>Staphylococcus aureus</i> WAS OBSERVED DIRECTLY UNDERNEATH THE TESTED SPECIMEN. WIDTH OF CLEAR ZONE OF INHIBITION WAS MORE THAN 31,3mm.

# CLEANING INSTRUCTIONS ON EASYWIPE™ PU COATED MATTRESS PROTECTORS



PRODUCT NAME	ACTIVE COMPONENT	CONC.	RESULT (Short Contact)	RESULT (Long Contact)
Chlor-Clean Tablets	troclosene sodium anhydrous	1000 ppm (1 tablet / 1 liter water)	OK	OK (possibly discolor of the PU)
Dettol	chloroxylenol	5%	OK	OK
Ethanol 70%	ethanol	70%	OK	OK (material starts to wrinkle+resistance PU-surface slightly decreased)
Formaldehyde	-	30%	OK	OK
Hansamed (spray)	chlorhexidin-diglucunas 1%	pure	OK	OK
Haz-Tabs	natriumdichloride	1000 ppm	OK	OK
Haz-Tabs	natriumdichloride	10.000 ppm	OK	not OK (discolor of the PU)
Hibicet	chlorhexidin-digluconate	pure	OK	OK
Incidin Plus	glocoprotamine	2%	OK	OK
Isopropylalcohol	isopropanol 70%	pure	not OK (material starts to wrinkle+resistance PU- surface decreased)	not OK (material starts to wrinkle+resistance PU- surface decreased)
Jodtinktur	jodium-kaliumjodine-ethanol	pure	not OK (discolor of the PU)	not OK (discolor of the PU)

Kodan Tinktur Forte	hydroperoxide-solution 30%	pure	OK (resistance PU-surface slightly decreased)	OK (resistance PU-surface slightly decreased)
Natriumhypochlorite	active chlorine	3%	not OK (discolor of the PU+resistance PU-surface decreased)	not OK (discolor of the PU+resistance PU-surface heavily decreased)
		0.3%	OK (resistance PU-surface slightly decreased)	not OK (discolor of the PU+resistance PU-surface decreased)
Octenisept (spray)	-	pure	OK	OK (resistance PU-surface slightly decreased)
P3-Topaxx 66	sodium hypochloride + hydroxide	5%	OK	OK (material starts to wrinkle+possibly discolor of the PU))
Sagrotan (spray)	-	pure	OK	OK
Sanit P20	mono-ethanol amina	pure	OK	OK
Sagrotan Med (spray)	alkylhydroxypolyoxylene	pure	OK (material starts to wrinkle)	OK (material starts to wrinkle+resistance PU-surface slightly decreased)
Softasept N (spray)	ethanol-propanol	pure	OK (material starts to wrinkle)	OK (material starts to wrinkle)
Spring	glycoether-alcohol	pure	OK	OK
Sterillum	glycoether 85% etradecanol	pure	OK (material starts to wrinkle)	OK (material starts to wrinkle+resistance PU-surface slightly decreased)
Suma Bac D10	ammoniumchloride	1%	OK	OK
Surfa'Safe	didecyldimethylamoniumchloride	pure	OK	OK
Topaxx 421	sodium hypochloride +hydroxide	5%	OK	OK (material starts to wrinkle)
Virkon	potassium prexomonosulphate	10g/l	OK	OK
Volvone	ammonia	40%	OK	OK